

INTERNATIONAL DEVELOPMENT RESEARCH CENTRE  
IDRC

EVALUATION REPORT

RURAL HEALTH DEVELOPMENT PROGRAM  
(COLOMBIA)

MULTI-DISCIPLINARY RESEARCH CENTRE  
FOR RURAL DEVELOPMENT (CIMDER)

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The views expressed in this report are those of the author and  
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Evaluation Report

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ANNEXES

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## I. INTRODUCCION

As outlined in the Terms of Reference,<sup>1/</sup> the evaluation study presented in this report is part of the International Development Research Centre's policy to analyze the development and implications of selected projects, once they are completed, in order to incorporate these experiences into the Centre planning process. The Rural Health Development Program described in the Terms of Reference document was conducted by the Multi-Disciplinary Research Centre for Rural Development (CIMDER) in Colombia. This program differed from those usually receiving IDRC support in several ways. First, in terms of length (the project lasted 5 years), and second, one program objective was to have the project replicated in other areas as a rural development strategy.

The aim of this evaluation study is to gather information and critically analyze the Rural Health Development Program conducted in Colombia by the Multi-Disciplinary Research Centre for Rural Development (CIMDER). The analyses presented here covers the following areas:

- a. Project description.
- b. Research design and methodology.
- c. Effects on training and research capacity.
- d. Impact on health care delivery and research.
- e. Current position and future prospects.

While in progress, the project under study produced many reports: annual reports, an outside evaluation report done in June, 1978, a final report turned in in 1980 and the report on an initial evaluation of model replication in 7 health districts located in 5 different Departments in Colombia. IDRC itself wrote the Project Completion Report which dealt with the extent to which operational objectives were met, major findings, technical and administrative aspects and a general evaluation based on information available at Head Office in Ottawa. These documents, together,

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1/. IDRC. "Terms of Reference, Evaluation Study." Rural Health Development Program (CIMDER: Colombia) (3-P-73-0104).

with others, were consulted at the IDRC Regional Office in Bogota and at CIMDER headquarters in Cali and will be duly cited in the course of this report.

### 1.1 Study Methodology and Information Sources

This study was conducted from 21 February through 12 May 1983. It included:

- a) A review of documents and files at the IDRC offices in Ottawa and Bogota.
- b) Interviews with IDRC officials in Ottawa and Bogota.
- c) Interviews with national, departmental and local Colombian government officials.
- d) Interviews with officials from national and international organizations participating in programs run as part of the CIMDER project or that have put into practice the experiences acquired in the CIMDER project.
- e) A visit to CIMDER headquarters in Cali. Review of files and documents, interviews with CIMDER officials and a visit to the experimental project site in the northern part of the Department of Cauca.
- f) Visits to the Departments of Meta and Bolivar in Colombia, where the CIMDER model has been replicated through contracts jointly signed by CIMDER, the Ministry of Health and UNICEF.
- g) Visits to the Ministries of Health in Ecuador, Bolivia and Paraguay, three countries which, to varying degrees, have adapted CIMDER methodologies to the efforts they are making to implement national primary health care programs.

Annex 1 provides a detailed list of the institutions and people visited as part of this study. Annex 2 contains a list of the different documents consulted.

## 1.2 Study Limitations

To evaluate a program of the scope and complexity of the Rural Health Development Program (Programa de Desarrollo de Servicios de Salud Rural-PDSR) three years after its formal completion is a difficult task for one person to perform in such a short period of time (10 weeks). Fortunately, from the outset, the different institutions and individuals directly or indirectly linked to the project were extremely generous with their assistance, and there was a great deal of written information available at the IDRC offices in Ottawa and Bogota and at the CIMDER head office in Cali. The administrative support provided made it possible to complete the established itinerary on time, and all of the activities planned were carried out. Annex 3 shows the itinerary of trips made during the study.

An in-depth evaluation would have required the existence, from the beginning, of a series of pre-defined indicators related to the project and its results and would have required a more systematic analysis. The present study delved as deep as time and available information limits permitted. Nevertheless, despite these restrictions, it was possible to obtain an overview that gives a fairly accurate idea of the scope of the work done by the research group, the progress of the research done, the impact of the research on the group's research ability and the impact of research on health care both in Colombia and other countries.

## 1.3 Report Organization

This report is organized according to the sequence suggested in the Terms of Reference. Each chapter will describe study findings and will end with a summary and comments. The report ends with an overall appraisal of the project and several reflections that might be of use to decision-makers in the formulation of future policies and strategies for similar projects.

## II. PROJECT DESCRIPTION

The Rural Health Development Program did not grow out of nothing. It has its roots in a series of activities begun at the Universidad del Valle in the Sixties when the community health program got under way in the town of Candelaria; this program was part of the movement started by the six medical schools existing in the country at that time whose aim was to train "the doctor Colombia needs". The idea was to introduce the concept of social medicine into the medical curriculum and to establish an early contact between medical students and the population at large to familiarize them with the community's health problems and their inter-relation with social and economic problems. The PRIMOPS program was begun in Cali after the Candelaria one and is still in operation; one of this programs principal goals is to design primary health care systems in urban areas.

On the basis of the experience acquired in these programs, a number of multi-disciplinary study groups were formed during the Seventies in the Division of Health Sciences. Some of them, like the CIMS (Multi-Disciplinary Health Research Committee) and CIBIS (Research Committee on Health and Welfare), were not long-lived. The INDER Group (Multi-Disciplinary Research Group on Rural Development) was created; it was made up of economists, architects, engineers, educators, doctors, nurses and systems analysts. Of the many projects this group worked on, the health project was the most outstanding in terms of the extent of its development and the rapidity with which it grew. This project was submitted to IDRC for its consideration, and the result was the creation of CIMDER (Multi-Disciplinary Research Centre for Rural Development). It is clear then that CIMDER came into being as an institution as a direct result of the approval of the health project which overshadowed the other projects submitted by the INDER group, which included: non-formal education and its answer in terms of skills and abilities; the mechanization of the of the process of brick and tile making; water quality improvement and the extension of water service. From the very beginning the group lost



its multi-sectoral nature though it did remain multi-disciplinary; the Health Committee became the CIMDER Committee, and from then on, until the program reached completion, the Rural Health Development Program constituted the very heart of the research centre.

In the proposal submitted to IDRC, CIMDER views its future developments as evolving towards a more autonomous, national-level organization. However, this development would be contingent upon meeting the goals originally set and on the Centre's ability to attract new funds for research projects.<sup>2/</sup>

A detailed description of the project may be found in different documents available in the Bogota and Ottawa IDRC offices.<sup>3/</sup> Annex 4 contains the Project Summary containing an outline of project goals and study methodology. For the purposes of this evaluation, the following sections of this report will discuss key aspects and characteristics of the project.

## 2.1 Project Objectives

The project drew up health targets and goals that were clearly defined in terms of: modifying the rate of maternal mortality (a 60% decrease over 5 years) and infant mortality (a 50% reduction), reducing the occurrence of complications during pregnancy, delivery and the post-partum period, a 50% drop in nutritional deficiencies, parasite-related illness and oral morbidity among school-age children. The project also sought to achieve a reduction in adult morbidity.

To accomplish these goals, the project planned to:

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<sup>2/</sup>. CIMDER. Health Division. Universidad del Valle, "A System of Rural Health Services as a Basic Component of Rural Development Programs in Colombia".

<sup>3/</sup>. CIMDER. "Evaluation of the System of Rural Health Services" 1977-1979. February 1980.

- a. Extend the availability of primary health care services to 100% of the experimental population and provide access for 80% of the population.
- b. Extend drinking water services and waste disposal and reduce population overcrowding indicators.
- c. Redefine the role of auxiliary staff.
- d. Actively involve the family and the community in the project.
- e. Establish an effective reference system for increasingly complex levels of care.
- f. Develop model characteristics that make model replication feasible in other parts of Colombia and in other countries.

## 2.2 Project Area

An area in the northern part of the Department of Cauca was chosen as the site for model implementation. It took in the towns of Santander de Quilichao-site of the Regional Hospital, Caloto, Puerto Tejada and Corinto. The experimental area encompassed a population of 48.000 people and was divided into four units; one such unit was the "target area" where the first test of the rural health services system would be conducted and then later extended to the other three units.

## 2.3 Project Sequence

The project was broken down into three major phases: development of the system, system testing and system demonstration. The specific sequence of activities was:

- 2.3.1 Household Survey. The survey was conducted on a sample of families from the experimental area. It furnished information on socio-demographic situation, illness experienced two weeks prior to survey, utilization of health services, automedication, fertility, land use

and ownership, migration over the last five years, involvement in community activities and income and expenses.

- 2.3.2 Clinical Survey. A clinical survey on a sub-sample had been planned but was not done since it was thought that the information provided by the household survey was enough.
- 2.3.3 A Health Resources Survey on administrative organization, physical plant, financing, diagnostic services, ambulatory services and health centre facilities.
- 2.3.4 Design of the Planning Model. Definition of the area to be served (área de iso-servicio).
- 2.3.5 Creation of a Vital Statistics Registry based on information coming from local authorities, health promoters, and health institutions. The system ran for 12 months and then was unable to continue, apparently owing to the constant turnover of authorities. This experience was never documented.
- 2.3.6 Design of Instruments: Medical Manual for Rural families, Recruitment and Training Manual, Supervisor's Manual and Tutor's Manual.
- 2.3.7 Recruitment and Training of Staff. Conducted between May and August 1977. The first group was made up of 18 health promoters. The only cases of people dropping out of the program occurred one week after the training course.
- 2.3.8 Survey of the Acceptance of health promoters in the community. Conducted in 1978.

2.3.9 Delivery of Services.

2.3.10 Outside Evaluation. Done in June, 1978.

2.3.11 First Progress Report. 1976-1977. Written in September, 1977.<sup>4/</sup>

2.3.12 Evaluation of the System. Presented in February, 1980.<sup>5/</sup>

2.4 Project Development

As explained in the Project Completion Report (Annex No. 5), the project developed much along the same lines set out in the project design, with the only exception being the eight month difference between planned project time and the actual time it took. The following chapters will go into an in-depth analysis of: research design and methodology, project impact on CIMDER research and training capacity; and project impact on health research in Colombia and other nations. This chapter will discuss the characteristics of the project that constitute a unique experience, its significance, validity and replicability.

It is interesting to note that almost all of those interviewed who were directly or indirectly involved with the project expressed highly favorable opinions of it and highlighted its importance for the future of primary health care programs. This, then, could be taken as the first indicator used in this evaluation: consensus of opinion. Given the wide variety and range of institutions visited and people interviewed for this report, I believe it is a valid indicator, especially in view of

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<sup>4/</sup>. "A System of Rural Health Services as a Basic Component of Rural Development Programs in Colombia." Progress Report, 1976-1977. Cali, 1977 (Sept.).

<sup>5/</sup>. CIMDER. Op. cit.

the fact that the opinions offered were given three years after the project ended. This in no way invalidates the criticisms made of the project contained in the outside evaluation done in 1978. They are valuable and must be considered for similar projects in the future. Nonetheless, the virtually unanimous favorable opinion makes it possible to say that the research group in its work on the project was able to produce an impact, earned the respect of health researchers and administrators and made a valuable contribution to health care and the well-being of the rural population in Latin America.

#### 2.4.1 Project Timing

Colombia has a long history in the field of primary health care. The first experimental project involving the delegation of medical functions to health promoters began in the Fifties; the aim of these programs was to extend health services coverage to rural areas. This store of experience led to the establishment in 1970 of the National Coverage Extension Program which entailed training health promoters, initially as volunteers and later as members of the national health system. However, the program was directed towards the "basic health services" which viewed health as a synonym for "medical care" and overlooked the effect of social and development factors on a community's state of health.

Interestingly enough, by 1974 the CIMDER group had developed the concept of integral primary care as a means of furthering the "well-being" of rural communities; the term well-being was understood to mean not merely the absence of illness but also a suitable standard of living and health and a satisfactory lifestyle. This notion anticipated and actually surpassed the concept of primary health adopted four years later at the International Conference on Primary Health Care, held in Alta Ata under the auspices of the World Health Organization and the United Nations Children's Fund, which serves as a guideline for countries in their efforts to achieve "health for all by the year 2000."

This, in my mind, constitutes one of the project's greatest virtues. At the time of the Alta Ata declaration, this concept of health had already been developed and was being applied in an experimental area. This has enabled Colombia and other countries to benefit from the experience gathered over the years and to set up programs on a more solid theoretical and methodological basis.

#### 2.4.2 Conceptual Framework

The basic concepts underlying the program are:

That well-being is the experience of enjoying a given standard of living and health, a social condition and a lifestyle.<sup>6/</sup>

As the key factor in well-being and development, health promotes all of the other components in the definition. Health sector activities promote community organization as a means of reaching overall development goals.

Based on this concept, the project planned for productive associations built on the Family Health Groups ("Uniones Familiares de Salud") as one of its components. The idea was that these associations would develop into production and marketing cooperatives. Seventeen such Family Health Groups and production associations were founded during the course of the project; they did make some headway as regards agricultural production. However, project design made it impossible to verify these results and their validity. Information obtained in interviews, from perusing project documents and from visits to the experimental area suggest that, though theoretically significant, the Health Sector's true participation in implementing the broader concept of well-being is limited and some times frustrating. Sector action is confined by economic and social determining factors that lie beyond

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<sup>6/</sup>. CIMDER. "A Rural Strategy for Bettering Well-Being." Internal working document.

its control. Indeed, project results in organizing production associations and the eventual development of these groups into cooperatives were not especially successful, as we shall see.

- a. Of the 17 groups founded through the Family Health Groups, only 3 of them still participate in the production coops. The three groups are made up of 152 families, or approximately 9% of the total number of families in the target area.
- b. During the model development phase, six out of the eight health promoters unable to organize production associations lived in Villarrica, a town affected by serious economic, social and political problems such as high unemployment rates, high rates of emigration and an over-dependence on sugar mills.
- c. Although the health promoters, with the encouragement of the research group, were able to organize several associations in the target area, there is no way to link their relative success to the leadership of the Health Sector. The success of these efforts can also be tied to the group's leadership ability, which is independent from any sector association.
- d. Project progress in the field of increased production output was obtained with the technical assistance of the Colombian Institute of Agriculture (ICA) and must be viewed as modest in keeping with the information furnished by the ICA District Director for the Northern Cauca area: output increases per hectare for: tomatoes -- 15-22 tons; soy beans -- 1.2-1.5 tons; beans -- 0.7-1 ton; and corn -- 1.2-3 tons.

This does not mean that the health sector should not actively participate in community organization and development activities. What the project results do suggest, however, is that health sector participation is not the fundamental factor behind development, and that if not combined with social and economic efforts, sector action is restricted.

- e. The CIMDER health model has been replicated in Colombia with varying degrees of success. Community organization continues to focus on the traditional "Health Committee" system with its highly limited effectiveness.

#### 2.4.3 Innovative Aspects

In addition to its timeliness and broad conceptual framework, the project stood out in terms of the enormous imaginativeness and creative ability of the research group. It is rare to find a project that has developed and introduced so many innovations that are so well tied into one and other.

##### 2.4.3.1 New Categories of Health Personnel

At the community level the project conceived four types of health personnel: rural health promoters, family health leaders, family health groups and empirical midwives. The family health leaders and the Family Health Groups constitute the innovations.

The notion of the family health leader is tied to the idea of self-help health care. Family health care cannot be promoted until there is a degree of awareness and basic knowledge at the family level of the importance and feasibility of the family caring for itself. The first evaluation of the replication system<sup>7/</sup>

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<sup>7/</sup>. CIMDER. "First Evaluation of the Integrated Primary Care System in areas where the CIMDER methodology has been utilized." Cali, September, 1981.



showed that during the period between January-June 1981, 40% of the cases of morbidity reported in the 7 health regions where the system was implemented were treated at home. Insofar as the information provided by a health service statistical system permits, this figure would seem to reflect positive results as regards the educational activities undertaken by the health promoter and suggest the families' acceptance of the idea of self-help health care. Nonetheless, more work is needed to determine the reasons why illness was treated at home and what the results of home treatment were in terms of improvement and recovery. Research on this subject should be undertaken in a special project conducted as part of CIMDER's future research program.

Section 2.4.2 of this report commented on the Family Health Groups and their relative success in the target area and lack of replication in other parts of the country. CIMDER should document this experience and disseminate both the positive and negative results gathered from it.

#### 2.4.3.2 Selection and Training of Personnel

The lack of technical capacity of health promoters and the high drop-out rates are the major obstacles that have plagued primary health care programs throughout the world. The training and selection program designed by CIMDER was aimed at minimizing these two factors. The results obtained in the target area were optimal. During the five years the program has been in operation, only 2 of the 18 promoters who were initially trained have been replaced. One dropped out of the program and another died. However, the same does not hold true for the replication areas that were visited. In the Department of Meta, 16 of the 44 health promoters initially trained for the CIMDER system replication areas have dropped out over a period of 18 months. This drop-out rate is mainly due to changes in domicile and the promotion of promoters to higher positions within the Departmental Health system.

In the Carmen de Bolivar region of the Department of Bolivar, where the selection and training process followed CIMDER methodology to the letter, 6 of the 29 promoters trained in 1980 have dropped out of the program primarily as a result of shortcomings in the selection and training program and irregularities in the system of supervision.

These experiences suggest that the system works as long as the procedure for selection and training is carefully followed and is combined with continual supervision.

#### 2.4.3.3 Information System and System for Programming and Evaluating Primary Health Care Programs

This is perhaps the most innovative aspect of the project and the one that has had the greatest significance at the national and international level. The information found in the "Master Box" enables the promoter to diagnose the health situation in her community, to schedule her day-to-day activities on a monthly basis and to prepare accurate reports. The Box makes it possible for the supervisor to work with the promoter and evaluate the latter's work in terms of the needs of families and individuals in the community and not merely on the basis of statistical data. Evaluated as a whole, the importance of the Box in the program is that it makes it possible to measure not only the number and extent of coverage of the activities undertaken, but also the impact of these activities on community health.

The Master Box is made up of 10 items which, in turn, form the Information System on Primary Care Services. The Box contains:

- 1) A set of 10 record cards for systematic reporting.
- 2) A classification of illness.
- 3) A guide for classifying maternity risk.

- 4) A color chart.
- 5) An index file for the card file.
- 6) A register of vital statistics (births and deaths).
- 7) Maps.
- 8) Reference "tickets".
- 9) Health flags.
- 10) Tabulation forms.

Though the boxes may seem somewhat complicated, the evaluation visits confirmed that the promoters do learn to use them. This was done by checking over the cards which had been properly kept, the reports made on the basis of the information obtained and by participating in a training session in the Department of Meta.

The Master Box is the program component that has been replicated most completely in the replication areas. The health personnel interviewed in these areas was in agreement as to its great usefulness, especially when compared to the traditional SIS information system (National Health Information System-SIS).

#### 2.4.3.4 Classification of Illness

For statistical and patient reference purposes, a list of 93 symptoms, syndromes and illnesses was drawn up and grouped into 14 categories. Morbidity is expressed in a language the health promoter understands (headaches, an ear abscess, etc.). The classification is useful for referring clinical cases and providing a preliminary diagnosis and for classifying the prevailing morbidity in the area statistically.

At the beginning in the replication areas, doctors refused to accept patients referred to them by health promoters

who had made an initial diagnosis. After a while, however, the physicians came to accept the health promoters and to value their work. More work is required in this field by CIMDER researchers. It would involve a comparison of the preliminary diagnoses made by the promoters with those made by the physician. This comparison would permit to validate the procedure and to adapt and improve the classification list.

#### 2.4.3.5 Work Instruments

a) Microhealth post. The "mini" centre is comprised of the minimal essential equipment needed to provide first aid for emergencies; a series of 9 basic drugs for the symptomatic treatment of common ailments and the stationery, forms and receipts involved in the purchase and sale of medication. The best comment that could be made about the usefulness of this instrument was expressed by a high official in the Ministry of Health who said, "with a few slight modifications, this 'mini' health post could be set up in the homes of all the health promoters in the country, thereby making it unnecessary to build Rural Health Posts in Colombia."

It was observed in the replication areas that once this system is introduced into the traditional one, it suffers from the same problems as the official Health Posts: that is, from a lack of continual supplies. Because of its enormous potential, this instrument must be validated, perfected and presented to the Ministry of Health as a valid alternative to the Health Posts construction program.

b) Micro-laboratory. The idea of the promoters using an easy and effective "screening" process is a very good one. However, the lab screening process was not much used in the target area and its replication in other areas was virtually nil. The main obstacles in the way of its use were the difficulty in keeping the reactive paper strips and the lack of trust among doctors of the lab results obtained by the promoters.

c) The Modified Morley Strip (CIMDER strip). This instrument, used to measure the nutritional condition of children, is perhaps the best known innovation not only in Colombia but around the world. It is also the only one that has been duly documented and validated.

d) Health Flags. These provide a simple graphic way to show the community how its health situation is evolving. The acceptance and degree of replication of this instrument have been high.

e) Several environmental health instruments like the water chlorinator and the P.V.C. pump. These instruments were used to a very small extent in the target area and were not replicated.

To summarize this chapter on "Project Development", it could be said that the project was conducted in keeping with the original design as far as model development is concerned; the major project characteristics are: its timeliness, the breadth of its conceptual framework and the significant number of innovations introduced. The concept of the health sector as a promoter of development was not duly demonstrated in the experimental area, and the innovations varied widely in terms of acceptance and replication. One priority area for future research would be the documentation of several experiences and the validation of the innovations.

### III. RESEARCH DESIGN AND METHODOLOGY

At the risk of appearing a "purist", I must begin this section by saying that although the project was successful as regards the design and implementation of a model of rural health services, it left much to be desired in terms of research methodology and the presentation of findings. Though these problems in no way take away from the virtues

of the project, they do make replication more difficult and leave several hypotheses used in the original design unanswered.

### 3.1 Experimental Area

Two areas of study are defined in the original research design: the Experimental Area and the Target Area.

The Experimental Area covers 10 towns having a rural population of 48.000 inhabitants. It includes a valley area, a hilly one (with a warm climate) and highlands. The Target Area, which is in fact part of the Experimental Area, is part of the valley and has an approximate population of 12.000 inhabitants. In keeping with the research design, the system testing phase (see page 6) involved, not only its implementation in the target area, but also in the other three units into which the experimental area had been divided. In practice, however, the plans were not carried out. The project was never extended beyond the target area (25% of the experimental one). Though the reasons given for this during the visit to CIMDER may be valid (public order was cited as the reason), this limitation is not mentioned in any of the progress reports or in the final evaluation.

### 3.2 Experimental Design

The household survey provided the initial information on health conditions, socio-economic conditions and health service utilization (see page 6). The morbidity survey outlined in the original design was not conducted since it was thought that the information furnished by the household survey was adequate for the study purposes. From then on, all data and findings on coverage, quality and health impact were based on the information provided by the statistical service system (the Master Box). During the entire course of the project, one survey was done on community acceptance of the health promoters and another was done to validate the information provided by the Master Box.

Three major criticisms can be made of the experimental design.

The absence of a control group. During conversations with the research group, individuals stated that high costs prevented the use of a control group and that national averages had been used in its place. This would not be a completely valid substitution. First of all, given the significance and high cost of the study, the additional expense of two surveys (initial and final) conducted in a similar (control) area would not have placed an excessive burden on the total cost. Second of all, in my opinion, the national average used for comparative purposes have no validity.

The lack of a Household Survey similar to the first one and conducted in the entire experimental area at the end of the experimental period. This survey would have made it possible to measure the health impact of the project in the target area and also to compare results with the other three units of the experimental area. Information on these units is available through the initial survey and could serve as the basis for a control group. Moreover, this second survey could be used to ratify the findings of the 1979 survey on the validation of Master Box information. It was impossible to get an explanation of why this second survey was not carried out.

The lack of an on-going analysis of the information gathered during the Project. Though tabulations of information were done on a quarterly basis, this work was merely descriptive in nature and did not involve the intercrossing of variables or the use of analytical methods that would make it possible to study the observations in depth. The study contains a number of experiences worthy of more in-depth research and that should be better documented and disseminated.

One has the impression that the research group became so carried away with the community response to the project that it directed

most of its energies towards field work and neglected evaluation work. While one group was working in the field, there was no other one observing, measuring and analyzing. This has affected the quality of the reports and documents published and the Centre's current research capability.

The wide variety of experiences acquired during the project are stored in the minds of the researchers and there are an enormous quantity of figures to be found in the project files. Thus, there is still time to retrieve this information, analyze it and publish it. To do this, an inventory will have to be made of existing information and a plan of information analysis and publication will have to be drawn up. These plans must provide for statistical analysis and documentation through case studies and project experiences. Members of the original project team no longer affiliated with CIMDER could be called upon to help do this work. The publication of a book on the project has been discussed on several occasions; however, it might be more advisable to publish separate documents on different subjects aimed at different audiences, in addition to using specialized health and social science journals having a wide circulation.

Two kinds of research activities should be carried out in the near future, in order to better document the process and the project findings.

- 1) Analysis of the already available information. As mentioned, there is in the CIMDER files an enormous amount of statistical information produced by the statistic service system (Master Box) not only for the experimental area, but for the 7 replication areas in Colombia. Out of the 219 health and health services indicators which are possible to calculate with the information furnished by the Master Box, a group of approximately 10 to 15 indicators could be selected and



an analysis be made for the period from the beginning to the present time. This exercise will permit to make comparisons between the experimental area and the replication areas, and to obtain time trends related to community health indicators (mortality, morbidity, services demand), and services indicators (quantity, coverage, quality). Besides the statistical data, there is also documentation about a great number of experiences obtained during the research process which can be published as case studies. A good example is the documentation of the community organization component of the project, the community response to the research group initiatives, the difficulties and constraints, the obtained results and the lessons that can be drawn from the experience.

- 2) There is still the possibility of conducting the final Household Survey in the experimental area since, although financing ended in 1980, project activities have continued. A five-year observation period would be established to measure project impact on health and to do a comparison between the target area and the rest of the experimental area.

The final evaluation report presented in 1980 deserves special attention. It provides a good description of the project. As its authors state, time pressures made it impossible to do a more complete analysis of the process and its results. A reading of the report leaves the unsuspecting reader with the impression that it is easy to provide primary health care through health promoters and that such care produces miraculous results over the short term.<sup>8/</sup> The obstacles encountered and the limitations on the information presented are mentioned but are not analyzed or at all discussed in depth. It is

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<sup>8/</sup>. Saravia V., Jorge A. and Echeverry, Oscar. "Evaluation of the System of Rural Health Services." 1977-1979. CIMDER, Cali, February, 1980.

important to remember that the CIMDER experience has caught the attention of different national and foreign institutions that view it as an important lesson to be incorporated into their efforts to provide health services in unprotected rural and marginal urban areas. Thus, CIMDER has an enormous responsibility and must take care to document not only its successful experiences, but also the unsuccessful ones together with their draw-backs and limitations.

To summarize this chapter on research design and methodology, the following statements can be made:

The research and demonstration project was conducted in only 25% of the experimental area.

The experimental design lacked a control group and a final verification survey on findings.

During the project, there were shortcomings in the evaluation process and in the documentation of experiences.

The final report was wanting in the analysis of the information presented.

All of these conclusions suggest that the research process has yet to end. To date, the phases concerning the theoretical aspects of the model, model implementation in the target area and model replication in other areas of Colombia and in other countries have been completed. However, the overall model testing phase and the specific components of that phase remain unfinished. The work to be done includes: analysis and documentation of the information available on the experimental area, the validation of instruments and procedures and the possibility of project replication under different conditions.

#### IV. EFFECTS ON TRAINING AND RESEARCH CAPACITY

One of the most important results of a project such as the one under discussion here is its ability to strengthen the research capacity of the research group and further the development of the institution undertaking the project.

A later chapter in this report will describe the present structure of CIMDER, its current programs and future potential. This chapter will attempt to evaluate the effects the project had on fortifying the research capacity of CIMDER and its researchers and the contribution made by researchers to health research in different institutions.

The indicators used in this evaluation are:

Follow-up on the members of the research group from the time of the project initiation through the present. Where they are now and the type of work they are doing.

Research projects conducted by CIMDER since 1981.

Personnel trained by the project.

##### 4.1 Follow-up on Research Group Members

Of those initiating the project in 1974, only one person, the statistician Pedro Villafaña, has remained with CIMDER uninterruptedly to the present. Dr. Jorge Saravia, former CIMDER director, severed his ties with the institution between 1975-1978, and therefore, was not present during the time the methodology was developed. The table found in Annex No. 6 gives a summary of the information obtained regarding the positions currently held by members of the project research group no longer working with CIMDER.

Sixteen of the 36 researchers working in the group are currently doing research work or occupy positions directly related to such work. No information was available on 8 of the researchers, and the other 12 have either retired or hold positions that are unrelated to research work.

#### 4.2 Research Projects Conducted by CIMDER, 1980-1983

During this period, CIMDER has conducted the following research projects:

Design of cold store and ambient chamber prototypes to test the chain of cold store equipment in vaccination programs. CIMDER promoted this idea which was developed by the Engineering Division of the University. The Regional Centre of the Cold Store Chain is currently operating as the result of an agreement signed by the Universidad del Valle and PAHO/WHO. There is a project currently under way to hold a course on the management and supervision of a cold store chain and to write up procedures manuals.

"The impact of periodic de-parasitization on pre-school children having low-protein diets." IDRC financed the first phase of this project. Phase Two was submitted for IDRC consideration one year ago; it deals with the effects of a combined anti-helminthic and anti-amoebic treatment.

"The Development of Health Education Units" for the New School project sponsored by the Ministry of Education.

Over the last three years, CIMDER has concentrated its efforts on Model Replication in 7 Health Regions located in 5 different Departments in Colombia; this has been done by reaching agreements with the Ministry of Health, UNICEF, and the Colombian-Dutch Convention (See Chapter V). CIMDER has also provided the Ministry of Health of Ecuador with technical advice on the health component of the Rural Integrated Development Program.

#### 4.3 Personnel Trained by the Project

The Final Evaluation Report lists the training activities conducted by CIMDER which included: a quarterly presentation of the Health Service System to students in the Health Sciences Division; an annual course on Community Organization and Participation given to post-graduate Public Health students; and 14 graduate theses done under the advisorship of CIMDER professional staff. Some of the theses received direct financial assistance from CIMDER. As of 1980 it became possible to identify four theses done in CIMDER, two of them as part of an exchange program with Johns Hopkins University.

Two CIMDER officials received post-graduate training with project funds: one did post-graduate work in Community Education at the University of Maryland and the other in Community Health at the University of Liverpool.

In summary, the project made a significant contribution towards strengthening the research capacity of the researchers participating in it.

Project contribution to training was less than it could and should have been. This can be explained in part by the relative isolation of the Centre from the Health Sciences Division and the rest of the University.

Centre research activity has declined as the result of two main factors: CIMDER staff has spent most of its time on model replication in other areas of Colombia and in Ecuador, and the lack of funds.

#### V. IMPACT ON HEALTH CARE DELIVERY AND RESEARCH

The Rural Health Development Program marked a milestone in the history of primary health care programs in Colombia. The history of these programs

can be divided into before and after CIMDER. As a result, national health authorities are at the present time in the process of deciding about adopting all or part of the CIMDER model as a national policy on primary health care.

Though there has been a lack of publications coming out of the project, much information has been disseminated about it from its inception. The project has been visited by some 82 groups from both the public and private sectors of 22 countries. The CIMDER technical team has participated in 17 scientific events on health care, 11 of which were headed by CIMDER itself.

### 5.1 Replication in Colombia

Contacts were initiated with the Colombian Ministry of Health in 1979 to begin discussions on replicating the CIMDER model in several Departments in the country in response to the interest shown by various Departmental Health Departments. In 1980 an agreement was reached to include the "CIMDER methodology" in the plan of operations of the Convention signed between the Colombian government and UNICEF for the 1980-1983 period. Initially two health regions in the Departments of Bolivar and Boyaca were included in the plan which was later extended to cover two health regions in the Department of Tolima and one in the Department of Meta. The plan of operations involved:

At the Health Department level, "promotion groups" were formed and made up of the Head of Medical Care, the Head of the Information Service, the Head of Nursing, a sanitation official and an official from the Office of Community Participation.

A two-week training course for the promotion group at CIMDER headquarters.

Upon its return to its home ground, the promotion group, in turn, trains the regional health team from the region selected for replication.

Selection and training of health promoters and distribution of work instruments.

In addition to training the promotion group, CIMDER also provided direct technical assistance through periodic visits made to replication projects up until 1982.

At present, the Department of Bolivar and Boyaca have begun to replicate the model on their own in other health regions in these Departments; the Departments of Tolima and Meta have been included in the Colombia-UNICEF Convention for the 1983-1986 period.

The CIMDER methodology has also been replicated in one health region in the Department of Choco, in a colonization area, as part of the Rural Development Program sponsored by the Colombian-Dutch Convention.

In the course of the present evaluation study, I had the opportunity to visit the replication areas in the Departments of Meta (the Granada Health Region) and Bolivar (the Integrated Health District of Cartagena and the Regional Health District of Carmen de Bolivar).

Department of Meta. The inclusion of CIMDER methodology began in 1981. Forty-four of the ninety-one health promoters working in the Department have been trained using this methodology and work in 7 PHUs (Primary Health Units) that are part of the Granada Health Region. The Department has committed itself to extending this methodology to the Acacías, San Martín and Puerto Lopez Health Regions, which cover the entire rural plains area in the Department.

Generally speaking, the opinion of those health officials interviewed was favorable and a comparison with traditional methodology favored CIMDER methodology. Officials felt that the new methodology was more effective because it delineates their responsibilities more specifically and provides them with the work instruments that are suited to their tasks.

They mentioned the following problems:

- Low operating budgets.
- Erratic supply lines.
- Difficulty in applying proposed solutions to environmental health problems such as drinking water and human waste disposal.
- Limited community participation. Existing health committees are not very functional.
- Continuous turnover of rural physicians who have not been trained in CIMDER methodology and do not understand it.
- High drop-out rate among health promoters. 16 of the 44 promoters originally trained have left the program usually because they moved to another area or because they were transferred to other jobs within the Health Service.

Department of Bolivar. Replication began in 1980 with the training of 14 newly appointed promoters and the "re-training" of 15 traditional ones in the health region of Carmen de Bolivar. CIMDER methodology was rigorously applied during training, and the program received CIMDER technical assistance until 1982. This methodology currently forms part of the plan of study at the School of Nursing Aids in Cartagena which trains health promoters for the Department, and there are plans to retrain some 200 promoters. Starting in January 1983, replication began, with very little success, in the south-eastern sector of Cartagena.

The replication experience in Carmen de Bolivar has been much like the one in the Department of Meta except for the fact that the



drop-out rate among promoters has been much lower. Only 6 of the 29 people trained have left the program. This is probably due to the fact the selection and training process were carefully followed in Bolivar, and the population living there is more stable than the one living in the Department of Meta, which is a colonization zone.

After three years of replicating the model in Colombia the following conclusions can be reached:

The different components of the model can be replicated with varying degrees of success.

The components that have been replicated most successfully and have had the most impact are: the selection and training system; the information system; the "mini" health post, the CIMDER strip; and the health flags. Those components experiencing the most difficulties in the replication process were the ones dealing with community organization and community participation in overall development activities. This element, considered a basic part of the project's conceptual framework, has not been replicated in any of the Departments where the Ministry of Health has replicated the model.

The adoption by the program of the three basic components: selection and training system, information system and "mini" health post, constitute a considerable methodological advance. Although the adoption of the components might seem expensive, the long term results largely justify the initial cost. This is especially true in the case of the selection and training system, as could be observed during the site visits, not only in the replication areas in Colombia, but in other countries as well.

The application of the new methodology does not resolve in itself the problems frequently arising in the programs: drop-out, supply lines, supervision, hook-up with the formal health system. If left on

their own, the programs using CIMDER methodology are subject to the same deterioration observed in many traditional programs.

An evaluation is needed on replication and especially on its effects on health indicators in order to compare these results with those obtained in the experimental area.

The Ministry of Health plans to conduct an evaluation of the replication area this year before making a decision on the total or partial adoption of the model beginning in 1984.

## 5.2 International Replication

As mentioned earlier in this report, the project was widely known internationally owing to visits made to the project by a number of groups belonging to private and public institutions in 22 countries. The interest awakened by the visits and by the dissemination of this experience at scientific meetings has been reflected by specific requests from several Latin American countries for technical assistance in adopting this primary health care model in their national health programs.

### 5.2.1 Ecuador

In 1978 initial contacts were established with the Ecuatorian Ministry of Health which resulted in a workshop held in Cali for a group of Ministry officials. Later, the CIMDER group traveled to Ecuador and participated in the training of 60 health promoters and of a Promotion Group from the Ministry.

In 1981, CIMDER participated in the international bidding for and won the contract to provide technical advisory services for the health component in the Rural Development Program undertaken through an agreement reached with ISAID and with the participation of the Department of Integrated Rural Development (SEDRI), the Ministry of Health and the

Marginal Rural Development Fund (FODERUMA). Work on the project began in June, 1982 in three health areas used as the target area for testing the Primary Health Care System. The work is being carried out at the following levels: healthcentre-hospital; sub-health centre-rural health post. The following models are being implemented:

- 1) Definition of the target (population).
- 2) Diagnosis of the health situation.
- 3) Decision-making.
- 4) Programming.
- 5) Information System.
- 6) Organization and management.
- 7) Evaluation and Monitoring.

To provide technical advisory services CIMDER assigned a full-time consultant based in Quito to the project; this position is rotated on a quarterly basis, and the CIMDER Director makes periodic supervisory visits.

During my visit to Ecuador, I had the opportunity to discuss the health component of the Integrated Rural Development Program and the CIMDER participation with the following program officials:

Dr. Gustavo Estrella, responsible for the health component of the Integrated Rural Development Program.

Dr. Eduardo Navas, technical advisor and responsible for the coordination between the program and the Ministry of Health.

Ms. Marlene Muñoz, CIMDER consultant.

Dr. Ken Farr, USAID, health and population officer.

It was not possible to meet Dr. Miguel Almeida, from FODERUMA because he was out of Quito during the period of my visit.

As stated in the contract signed between the Ministry of Health and CIMDER, the technical assistance started in June 1982 and is expected to finish in March 1985. The following modules have been designed and approved by the Government:

Definition of the target population.

Diagnosis of the health situation.

The modules related to decision-making and programming are in the process of revision, since the Ministry of Health considers that they are not in accordance with the Ecuadorian health services structure.

After talking with the responsible officials and reviewing the documents, the following conclusion can be drawn with respect to the relationship between the CIMDER project under evaluation and the Ecuadorian Rural Health Program.

- 1) The technical assistance provided by CIMDER has evolved from primary health care to the more general process of health administration.
- 2) There has not been an adequate coordination among the different consultants who have worked in the program. Each one has brought to the project his own ideas. It seems that there is not a conceptual framework that makes the work of the consultants coherent.
- 3) The project is isolated from the Ecuadorian Health System. The national group who is working as

CIMDER counterpart is very young, without any experience and knowledge about the country health situation and health policy and structure. This makes that their work is not respected by the Ministry of Health, especially the Direction of Health Planning. No one of the Ministry officials who attended the workshop in Cali, have at the moment any relation to the project.

- 4) There is not any coordination between the project and other efforts that the country is making in the field of primary health care, as the Rural Health Program that is being carried out with the Inter-American Development Bank and PAHO.

#### 5.2.2 British Guyana

Contact was initiated in 1979 through UNICEF. Two CIMDER officials worked with the Health Service Development Office, Ministry of Health, Housing and Labor in the adaptation of CIMDER methodology, translation of the manuals and their adaptation to the MEDEX system. This relation has continued through periodic correspondence.

#### 5.2.3 Bolivia

The exchange with Bolivia was begun by Dr. Oscar Echeverry, working as World Bank consultant on the Ulla-Ulla rural health project. Later, Dr. Jorge Saravia, also working as a World Bank consultant, worked in the Maternal-Child Division of the Ministry of Health providing advisory services in 1980, 1981 and 1983 to the primary health care project that has been carried out in the sub-urban area of El Alto in La Paz since 1979 with the financial assistance of the World Bank. This project will come to the end in December 1983. The Govern-

ment is now preparing a proposal to extend the coverage to other sub-urban areas in La Paz and to the regions of Cochabamba, Santa Cruz and Oruro. It is expected that if a new agreement is signed, CIMDER will provide the technical assistance. As a matter of fact, Dr. Jorge Saravia is now working with the Bolivian group in the preparation of the proposal.

The actual primary health program in El Alto has been a very innovative one. The most important features are:

- 1) The division of work among the different types of health personnel: health promoter (Red bracelet); auxiliary nurse, school brigades and physician at the health post. This division of work has permitted to extend the coverage from 83.000 people, which was the initial target population, to 110.000 maintaining the per capita cost at a level of US\$ 3 per year.
- 2) The school brigades. In each school a group of student leaders are identified and trained in the identification and referral of some health conditions and environmental risks.
- 3) The early stimulation to children under 2 years of age, with the active participation of the mothers.

With respect to the CIMDER approach, three components have been introduced until the present time: the Master Box, the CIMDER strip, and the classification of illness, adapted according with the results of the morbidity survey.

All the officials interviewed during my visit expressed satisfaction with the CIMDER collaboration and their interest in the

continuation of the institutional relationship. Doctor Gonzalo Arevalo, project coordinator, is planning to go to Cali in September to get his M.P.H. degree and to become familiar with the entire CIMDER system.

#### 5.2.4 Paraguay

As yet there is no direct relation between CIMDER and the Government of Paraguay. Dr. Oscar Echeverry visited this country in December, 1977 as a World Bank consultant who was to provide advisory services in drawing up the operational plan for the Second Rural Development Project in the Department of Itapua, a colonization zone located in South-eastern Paraguay. In 1978, Dr. Echeverry returned to Paraguay with Mr. Pedro Villafaña in order to:

- Hold a seminar on the structure and functions of the Rural Health System.
- Hold a seminar on Community Organization Methodology.
- Hold a seminar on the Methodology for Organizing Health Care Services and Environmental Health Services.
- Hold a seminar on the recruitment and training of human resources.

During my visit to Paraguay, I had the opportunity to meet the Director of the Rural Development Program and the Regional Health Director of the Encarnación Regional Hospital in the Department of Itapua. I also visited the colonization zone and interviewed two groups of health promoters in the districts of Capitán Mesa and Domingo Robledo. This visit was done jointly with Dr. Oscar Echeverry, who was at that time visiting the country as a member of a World Bank mission.

As was mentioned early in this chapter, the only connection between CIMDER and the Rural Development Program has been the

technical assistance provided in 1977 and 1978 by Dr. Oscar Echeverry and Mr. Pedro Villafañe. Following their recommendations, the program adapted the CIMDER Health Promoter Manual and the selection and training system. A total of 70 health promoters have been trained in three courses held in 1978, 1979 and 1980. Because of budgetary constraints, no other courses have been carried out. At the present time, 43 of the 70 trained promoters are working in the three districts of Capitán Mesa, Domingo Robledo and Mayor Otario. It was very interesting to observe the big differences between the two groups of health promoters with whom we had the opportunity to talk. They were completely different in terms of knowledge and attitude toward their work. Looking for the likely reasons for the difference we found out that the selection process of the first group had followed the CIMDER methodology while the second group had been selected following different criteria. This observation is similar to the experience obtained in the Colombia replication areas: every effort is justified in order to follow a strict selection procedure.

There is the general impression that the health component of the rural development program has had a considerable impact on the health situation of the area. However, there is no any data to support this impression.

In relation to the repercussions of the Itapua experience at the national level, the health authorities are satisfied with the results, but the Ministry of Health is not yet in the position to define a national primary health care policy.

To summarize the observations made during the site visits to the 3 countries where the CIMDER experience has been adopted to some degree, the following conclusions can be drawn:

Although the institutional relationship is more structured with the Government of Ecuador, the possibilities of replication of the



CIMDER model are greater in Bolivia, due to the high degree of receptiveness shown by the health authorities and the capacity of innovation demonstrated by the program administrators.

The experiences of Paraguay in primary health care are limited and the Ministry of Health is not yet in the position to adopt a national policy.

## VI. CURRENT SITUATION AND FUTURE PROSPECTS

The previous chapters have gone over the development of the Rural Health Services Program from its initiation in 1974 through the present. Program development and the development of CIMDER have been much the same since, as mentioned earlier, the Program constituted the mainstay of Centre activity up until 1980. From that time on, when IDRC funding stopped, CIMDER has concentrated most of its efforts on replicating this health service model in other parts of Colombia and Ecuador, on conducting two research projects and on preparing new projects to be submitted to funding agencies for their consideration.

It was unwise for the Centre to depend on one sole source of funding. The Director has made enormous efforts to try and maintain the institution on the basis of technical advisory service contracts; he has also attempted to open new, more diversified fields of research, as we shall see further along. The experience of model replication has been a significant one, but it is clear that the Centre's research capacity has declined.

### 6.1 CIMDER Today

#### Structure

Director: Dr. Jorge Saravia

Associate Researchers:

<u>NAME</u>	<u>SPECIALITY</u>	<u>LENGTH OF SERVICE</u>
Pedro Villafañe	Statistician	8 years
Roberto Otero	Anthropologist	3 years
Esmeralda Burbano	Health Administration	4 years
Marlene Muñoz	Statistician-Administration Systems Analysis	3 years
Laura Borja	Communications	1 year
Antonio Reyes	Physician (G.P.)	2 <sup>1</sup> / <sub>2</sub> years
Opening	Nurse	
Opening	Health Planner	

Support Staff : two secretaries and a driver.

Centre technical personnel is insufficient to meet Centre commitments taken on in conventions and to further research projects. The Centre has lost highly qualified and experienced technical staff and has been unable to replace them because of the unstable economic conditions and limited job security it offers. Another factor affecting low research capacity, aside from the lack of staff, is the termination of the inter-institutional agreement in 1979 which has contributed to isolating the Centre.

#### Institutional Affiliation

The Centre is directly dependent on the Office of the Dean of the Health Sciences Division of the University. It is, however, highly autonomous, which works to its advantage insofar as it enables Centre staff to follow through on their own initiatives. But at the same time this independence could be interpreted as a lack of interest on the part of the University which views it as an outside institution. During the interview held with the Rector of the University, a physician and Dean of the Health Sciences Division when CIMDER came into being, he expressed

his sympathy towards the Centre and its work and his interest in seeing the Centre receive further international aid in order to continue its research work. He underscored the need for the university to continue doing research on rural primary health care and considers the CIMDER model as the starting point for future research.

The Foundation for Higher Education (FES) continues to manage CIMDER funds and supports CIMDER financing. FES directors expressed their fervent approval of the work done by the Centre and expressed their willingness to continue supporting new Centre efforts.

It is my impression that CIMDER is currently in what could be termed an institutional vacuum. The inter-institutional group no longer exists. The institutions having dealings with the Centre are sympathetic towards it, but there is no specific concrete support for the Centre to guaranty its survival and growth.

### Financing

The only two sources of financing available to the Centre are:

a) The CIMDER Standing Fund. The Foundation for Higher Education (FES) has set up a fund based on the interest it receives from its investments called the FES-University Fund which currently comes to Col.\$ 40 million. The interest coming from the Fund goes directly to the Health Sciences Division which uses 70% of it and reinvests the other 30%. The CIMDER Standing Fund has been established on the basis of the Fund and currently come to Col.\$ 5 million; it is used in the same way the Health Sciences Division uses its money: 70% is used for Centre operations and the other 30% is reinvested. This is the only source of on-going financing the Centre has at present.

b) Technical Assistance Contracts. These include contracts currently in effect such as those signed with the Ministry of Health

and the Ministry of Education in Colombia and with the Ministry of Health in Ecuador.

Paid on a day worked basis, these contracts currently pay the salaries of five associate researchers. The University pays 50% of the Centre Director's salary and the rest of the budget (the other 50% of the Director's pay, the salary for 3 researchers and the support staff, and operating costs) come out of the CIMDER Standing Fund. Clearly then, the Centre continues to operate thanks to the major efforts of its Director and the unswerving dedication of its researchers.

### Research Projects

The research projects currently under way include:

- a) Development of a model to diagnose, plan and evaluate the National Health System. Research done on the basis of a contract signed with the Ministry of Health.
- b) Development of the education units for the "New School" project under contract with the Ministry of Education.

Furthermore, the following research proposals are in different stages of development:

- a) "Alternate Solutions to Administrative Problems in the Delivery of Primary Health Care Services."
- b) "Administrative Support for Immunization Programs."
- c) "Strategies for Bettering the Income of Women Heads of Household as a Means of Improving the Nutritional and Health Situation of their Children."

- d) "Consequences of Peri-natal Risk: early neurological problems and later neuro-psychological problems among high risk perinatal children."
- e) "Comparative Cost Analysis of Primary Health Care."
- f) "A Proposal for Evaluating the Impact of Two Nutritional Monitoring Methods on Pre-school Colombian Children."
- g) "Study to determine the Impact of Current Environmental Health Policies on Morbidity in the Population."

(A retrospective analysis of the health and environmental health situation existing in the Valle del Cauca from 1970-1980).

- h) "Approaches to a Methodology for Implementing Traditional Health Programs needed by the Rural Community."
- i) "Proposal to evaluate the viability and acceptability of an oral rehydration program in the treatment of diarrhea."
- j) "Associative Organization System. Elements to define a strategy for rural development in the northern part of Cauca."
- k) "Validation of the CIMDER strip in three Latin American countries: Colombia, Bolivia and Brazil."
- l) "A Universal Information System for Primary Health Care, information to evaluate the impact of promotion activities on breast-feeding, oral rehydration, nutritional monitoring and immunizations."

Many of the ideas found in these proposals are important for primary health care programs in Colombia and other countries. The major question is: is CIMDER currently in a position to develop these proposals, seek the necessary financing and conduct the research? This question, however, turns into a vicious cycle: the research cannot be done because of a lack of staff and research infrastructure and these two elements cannot be furnished if there are no projects to finance the Centre.

## 6.2 The Future of CIMDER

CIMDER's future was discussed with its Director, with Dr. Oscar Echeverry, with the Rector of the University and with the directors of FES.

One thing seems certain: given the current institutional vacuum, the shortage and instability of staff and the financial difficulties, CIMDER's future as an institution remains very uncertain. Several alternatives were discussed during these conversations since it was thought that all of the experience acquired by the Centre should not disappear with the Centre's dissolution.

- a) Continue with CIMDER in its current organization, increase its regular budget through efforts made by FES and greater institutional support from the University and further financing from projects approved by funding agencies. Dr. Saravia believes this is the best alternative.
- b) Direct CIMDER development towards the establishment of a University Research Centre in which all of the different Divisions in the University would participate. This, in Dr. Oscar Echeverry's opinion, is the best alternative. It would require a commitment from the University for

economic support and would require University teaching staff to become involved in research activities.

- c) Intensify CIMDER ties with the Division of Health Sciences, broaden its research infrastructure (methodology, data processing, documentation centre, publishing facilities), and involve teaching and research staff from the Division, who are currently under-utilized, in Centre research projects. The Centre would continue doing health research work, with an emphasis on rural primary health care that follows the general path set out by the Rural Health Development Program. To this end, Dr. Saravia has recently talked with professors and researchers from the Department of Social Medicine who have shown interest in working on Centre projects. In my opinion, this would be the most viable alternative provided that Centre financial woes were also resolved. One possible solution would be to obtain a commitment from the Health Sciences Division to incorporate part or all of its staff into the Division over a period of two years and to provide financial support for the Centre during this time through a project that would analyze and publish the results of the Rural Health Development Program.

### 6.3 Other Research Groups

CEPADS (Centro de Apoyo para el Desarrollo en Salud) (Health Development Support Centre). This Centre, located in FES and financed by the Kellogg Foundation has as its main objective to promote the innovative approaches in primary health care and university based teaching-service integrated programs. At the present time there are five Colombian universities affiliated to the Centre, including the University of Valle. The types of support provided by the Centre are:

- 1) Technical assistance in the development of research projects, including publication.
- 2) Financial and administrative support. At the University of Valle, the Centre has created the FES-University Fund mentioned in the section 6.1. With this fund, several research groups are being supported: Maternal and Child Health, Dental Health, Adult Health, Mental Health, Surgical Primary Care, School Health. All these groups are trying to coordinate their efforts, with the Centre support, towards the common goal of promoting Family Primary Care Projects and the long term prospects are very ambitious in terms of research, teaching, and international cooperation. It is noteworthy the lack of coordination between CIMDER and CEPADS, which could be one source of financing and technical cooperation.

#### VII. IDRC SUPPORT AND FOLLOW-UP

As a rule, relations between IDRC and CIMDER were good over the period of time the project ran, except for a few minor problems that were documented in the correspondence reviewed for this report that had very little effect on the program.

The plan of operations made provisions for technical assistance furnished by consultants in the following areas: Information Systems, Communications, and Educational Technology and Mathematical Models in the Social Sciences. However, none of these consultancyships were implemented, no reference is made of them in any project document and none of those interviewed was able to answer why this had happened. I believe that a project of the magnitude and importance of the RHDP would have greatly benefited from more technical inputs provided by IDRC, particularly in the areas of information systems and research methodology (epidemiology and social sciences). Such assistance would have had a positive



effect on the scientific quality of the project. The possibility of running a "Training-Research Seminar on Design, Execution and Evaluation of Simplified Medicine Programs"<sup>9/</sup> was discussed; the aim of the seminar was to consolidate a group of teachers and trainers in the field of Simplified Medicine for Latin America and to contribute to the establishment of different delivery service systems. This initiative also remained unimplemented, but is still valid, especially now that the model has begun to be replicated in other countries. This could be a great opportunity for IDRC long-term involvement in the process of development of one of the most important and controversial health issues such as Primary Health Care and its contribution toward the worldwide goal of "Health for Everybody in the Year 2000".

As an additional suggestion, it would be wise to include in the future in the operational plans of all projects, but above all in projects of the importance and complexity of the RHOP, a plan for IDRC evaluation and follow-up that provides for gathering systematic objective information (Progress Reports) and outside evaluations that follow a specific plan and are not the result of a crisis situation as seems to have been the case in the RHDP project. An internal project evaluation should be included in every plan of action with the definition of periodic follow-up indicators which should be included in the progress reports in a systematic way.

#### VIII. SUMMARY AND CONCLUSIONS

- 1) Many of the observations made in this evaluation report may be found in previous evaluation documents both of an internal and external nature. In the present study,

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<sup>9/</sup>. "Training-Research Seminar on Design, Execution and Evaluation of Simplified Medicine Programs (TRESIM)", Workind Document (3-P-73-0104).

these observations were analyzed retrospectively with three years' hindsight after project completion and they focussed on the research group, the institution (CIMDER) and on primary health care in Colombia and Latin America.

- 2) One limitation of this evaluation report is the fact that it was done by one person. This meant not only a very large work load for one person, but also made it impossible to discuss what was observed; consequently it may contain personal biases that were not questioned.
- 3) The project under study was conducted according to the original design and was characterized by its timeliness, its broad conceptual framework and the generation of innovative ideas in the delivery of primary health care services in rural areas.
- 4) From a methodological and documentation point of view, the project experienced serious difficulties. The overall project model and its specific components, save in a very few cases, have not been validated and the wide variety of experiences have not been adequately documented and published. One might say that the project's research component was interrupted at an early stage.
- 5) The project has been widely disseminated through visits made to it and through the participation of the project research group in scientific meetings.
- 6) The project has had a major impact on primary health care programs in rural areas of Colombia. The Ministry of Health, in conjunction with UNICEF, has replicated many of the model components in several regions in the country and is currently

in the process of deciding which of the components to include in a national primary health care policy.

- 7) Not all of the model components have been equally replicable. Those having the greatest impact are the promotor selection and training systems and the statistical information system. Even if national programs only adopted these two components, they would take a major stride forward in terms of methodology.
- 8) The project has begun to have significant impact on primary health care programs in other countries in Latin America, especially in Ecuador, where the model is in the process of replication in three areas of the country and Bolivia where some of the components have already been replicated and it is possible taht the model is extended to three regions.
- 9) The replication experience in Colombia shows that the adoption of the methodology does not solve the major problems affecting primary health care programs in and of itself. These problems include high drop-out rates, logistical problems with supplies and hook up with the formal health system.
- 10) Project impact underscores the need for CIMDER to provide better documentation on this experience and to make a comparison of project impact on health in the experimental area and in replication areas.
- 11) The research capacity of the members of the project research group was enhanced through participation in the project. A high percentage of the researchers who worked on the project are currently doing post-graduate work or are involved in activities closely related to research.
- 12) The same does not hold true for CIMDER as an institution. Due to its institutional "vacuum", its isolation and its financial

problems, CIMDER research activity has fallen off. The Centre has lost much of its staff, and those who remain spend most of their time on technical assistance activities.

- 13) It would be best if this process of CIMDER disintegration came to a halt. To do this, it would be advisable for CIMDER to develop closer ties to the Health Division at the University, broaden its research infrastructure and involve teaching and research staff from the Health Sciences Division in its work. The possibility of providing the Centre with support for two years so that it can complete the analytical research and publication of findings phase should be considered.

## A N E X I

### Institutions and Persons Visited

<u>Name</u>	<u>Institutions</u>
Dr. Douglas Daniels	I.D.R.C. - Ottawa
Dr. Elizabeth Charlebois	I.D.R.C. - Ottawa
Mr. Terry Smutyllo	I.D.R.C. - Ottawa
Ms. Caroline Hernández	I.D.R.C. - Ottawa
Dr. Fernando Chaparro	I.D.R.C. Bogotá
Dr. Ramiro Beltrán	I.D.R.C. Bogotá
Dr. Rodrigo Arboleda	UNICEF - Bogotá
Dr. Eduardo Solano	Ministry of Health- Bogotá
Dr. Ricardo Ruiz	Ministry of Health- Bogotá
Dr. Wilson Rodríguez	Ministry of Health- Bogotá
Dr. Ricardo Galán	Colombian Association of Medical Schools (ACOFAME)
Dra. Ines Durana	Private Consultant
Dr. Henrique Tono	Former Director - I.D.R.C.-Bogotá
Dr. Alcides Estrada	Corporation Regional Population Center (C.C.R.P) - Bogotá
Dr. Oscar Echeverry	World Bank
Dr. Jorge Saravia	CIMDER - Cali
Mr. Pedro Villafañe	CIMDER - Cali
Dr. Roberto Otero	CIMDER - Cali
Ms. Esmeralda Bribano	CIMDER - Cali
Ms. Laura Borja	CIMDER - Cali
Dr. Hugo Lora	FES - Cali

<u>Name</u>	<u>Institutions</u>
Dr. Alex Cobo	FES - Cali
Dr. Alfredo Aguirre	University of Valle - Health Sciences Division.
Dr. Rodrigo Guerrero	President, University of Valle
Dr. Ernesto Navia	I.C.A. - Northern Cauca
Dr. Agustín Gutiérrez	State Health Department - Villaviciencio, Meta.
Dr. Pedro López	State Health Department - Villaviciencio, Meta
R.N. Martha García	State Health Department - Villaviciencio. Meta
Dr. Ramiro Fabregas	Health Regional, Granada, Meta.
Dr. Cecilio Saad	Cartagena Health District.
R.N. Rosalba de Malo	Cartagena Health District
R.N. Aydee Saltarem	Health Region - Carmen de Bolivar.

## A N E X II

### REVISED DOCUMENTS

- 1.- CIMDER.- "A System of Rural Health Services as a major component of Rural Development projects in Colombia" Grant request submitted to the International Development Research Center. Canada. January 1974.
- 2.- I.D.R.C. "Rural Health Development Program (CIMDER: Colombia) Phase I" File 3-P-73-0104 Project Summary. February 20, 1974.
- 3.- University of Valle. "CIMDER - Constitution Agreement" , Cali, Sept. 1974.
- 4.- CIMDER.- "A System of Rural Health Services as a basic component of Rural Development Programs in Colombia". Progress Report 1976-1977. Cali, Sept. 1977.
- 5.- CIMDER.- "A System of Rural Health Services as a basic component of Rural Development Programs in Colombia" Progress Report 1978. Cali, 1979.
- 6.- Requena B. Mariano and Irazuzta Jorge. "Rural Health Development Program for the Northern Region of the Cauca Department" Evaluation Report. Bogotá, June 1978.
- 7.- Saravia V. Jorge A. and Echeverry Oscar. "Evaluation of the System of Rural Health Services" 1977-1979. CIMDER, Cali, Feb. 1980.
- 8.- CIMDER.- "First Evaluation of the Integrated Primary Care System in areas where the CIMDER methodology has been utilized". Cali, Sept. 1981.
- 9.- Administrative correspondence of the project. 1974-1981.

10.- CIMDER.- Technical Manuals

11.- CIMDER.- "Proceedings of the First Seminar of Associative Groups and Rural Health Promoters in the Northern Cauca" Buga, May 1978.

12.- CIMDER.- "A Rural Development Strategy for Improving the Well-being". Working Documents.

13.- CIMDER. - Work Instruments.

Household Survey Form

First Aid Programmed Instruction Manual

Health Facilities Survey Form

System of Rural Health Services the Master Box.

Rural Health Promoters. Selection Manual.

Northern Cauca. Health Services Structure.

14.- Proposal for a transition towards a Center of Multidisciplinary Research in Rural Development. June 1977.

15.- CIMDER.- "Information System"

Anex 1: Methodology for information processing in a Primary Care Program.

Anex 2: Health Conditions Estimative Health Indicators.



# ANNEX III

## ITINERARY OF TRIPS MADE DURING THE STUDY

<u>Time Period</u>	<u>Location</u>	<u>Activity</u>
February 21-26	Ottawa	Files Review. Discussions with IDRC Staff. Approval of final working plan.
February 27-March 15	Bogota Cali	Files Review. Interviews with Minister of Health Authorities. Interviews with CIMDER and University of Valle Staff. Field trip to Cauca: Interviews with Health Authorities, Health Workers and project recipients.
March 15-April 2	Villavicencio Granada Cartagena	Interviews with Health Authorities and Health Workers.
April 3-16	Quito La Paz Asunción	Interviews with Health Authorities. Field trips.
April 17-May 1		Personal
May 2-12	Bogota	Writing and discussion of final report.